

ABSTRACT

The present invention relates to a method of forming a metal line layer in a semiconductor device comprising step of depositing a metal line layer on a semiconductor structure; forming an insulating film and a photoresist material on the metal line layer in a sequential manner; patterning the metal line layer by using the photoresist material and the insulating film as a mask; removing the photoresist material; and etching the insulating film in an isotropic manner.

According to the present invention, since metal polymers and metal residues are perfectly removed during the process of forming the metal line layer, it is possible to remove sources, which induce the bridge phenomena. Therefore, it is possible to remarkably improve reliability of a semiconductor device.